



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,684	01/22/2002	Francis James Canova JR.	035451-0132 (3645.Palm)	5151

26371 7590 01/19/2005

FOLEY & LARDNER
777 EAST WISCONSIN AVENUE
SUITE 3800
MILWAUKEE, WI 53202-5308

EXAMINER

SHENG, TOM V

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,684

Applicant(s)

CANOVA, FRANCIS JAMES

Examiner

Tom V Sheng

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

page 10, line 22, "entry area 119" should be "entry area 118";

page 10, line 26, "switch 118" should be "switch 119";

page 11, line 5, "switch 118" should be "switch 119".

Appropriate correction is required.

Claim Objections

2. Claim 15 is objected to because of the following informalities: on line 1, please change "claims" to --claim--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 2673

Regarding claims 1 and 8, the disclosure, when filed, does not fairly contain information regarding the claimed features, "the switch positioned on the housing such that when the housing is squeezed by the one hand, the switch is toggled", of independent claim 1, lines 5-6 and independent claim 8, lines 8-9. The disclosure, specifically fig. 3 and 4 and the description on page 10, lines 17-20, states "handheld computer 100 is shown with switch 119 disengaged (Fig. 3) and with switch 119 engaged (Fig. 4). In Fig. 3, switch 119 is a pressure sensitive switch located on at least on lateral side 121 of computer 100"; i.e., even though the switch 119 is located on the lateral side 121 of computer 100, the activation of entry area 118 has to be via the switch 119 and not just when the housing is squeezed by the one hand, as presently claimed. Accordingly, the original disclosure does not fairly convey to one of ordinary skill in the art that inventor(s) had in their possession the above underlined features presently recited in claims 1 and 8.

Claims 2-7 and 9-17 are rejected as dependent on claims 1 and 8, respectively.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 8 recite "the switch positioned on the housing such that when the housing is squeezed by the one hand, the switch is toggled", of independent claim 1, lines 5-6 and independent claim 8, lines 8-9. However, it is unclear how squeezing the

Art Unit: 2673

housing would toggle the switch. This lack of correspondence renders the claims indefinite. Claims 2-7 and 9-17 are rejected as dependent on claims 1 and 8, respectively.

In accordance with the 112 rejections above, the following rejections are made under the assumption that the switch is pressed by a finger of the hand as the housing is squeezed (held) by the hand.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry, Jr. (US 5,881,169) in view of Danielson et al. (US 5,805,474) and Armstrong (US 6,559,831 B1)

As for claim 1, Henry teaches a handheld computer system (figures 1, 3, 5; portable computing device), comprising:

- a switch (a switch on the computing device);
- a user interface (display screen 120/400 with different text input/selection fields);
- a housing (shown outside the display screen 120); and
- a display supported by the housing (display screen 120/400),

Art Unit: 2673

wherein the user interface includes a text information entry area (individual character selection field 220),

wherein the text information entry area is activated in response to manipulation of the switch (displaying the character selection field 220 when invoked), the switch being a switch device located outside of the display (this switch is outside the display screen versus an equivalent activation area 411 on the display screen). See column 2, line 65 through column 3, line 12; column 3, lines 31-44; and column 4, lines 34-61.

However, Henry does not teach wherein the switch is a pressure sensitive switch, and wherein the housing supporting the pressure sensitive switch on a side of the housing, the housing being sized to be held in one hand, the switch positioned on the housing such that when the housing is squeezed by the one hand, the switch is toggled.

Danielson teaches a portable data collection terminal with a switch 472, wherein in one mode an internal scanner is activated when the switch is depressed and released and is deactivated when the switch is depressed and released a second time (figure 29 or 30; column 25, lines 49-57). This method is well known in the art as toggling.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate Danielson's switching method into Henry's switch, since this is a very common and straight-forward way of using a switch (toggling) in activating and deactivating the selection field 220.

Still, Henry, in combination with Danielson, does not teach wherein the means for activating and deactivating is located on the side of a housing of the handheld

Art Unit: 2673

computer, the housing being sized to be held in one hand, the switch positioned on the housing such that when the housing is squeezed by the one hand, the switch is toggled.

Armstrong teaches a handheld PDA where there is a (pressure-sensitive) analog rocker 14 on the side of housing 11 (Fig. 6; column 6, lines 3-47). Inherently, the rocker 14 is to be operated by a left hand that holds the PDA at the same time. At the time of the invention, one of ordinary skill in the art would recognize a similar benefit of having modified Henry's switch on the side of the housing so that the activation and deactivation of the character field 220 could be done conveniently by toggling of the switch by a finger of the same hand holding the portable computing device.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to locate modified Henry's switch on a side of the portable computing device to be operated and hold by the same hand, thus providing the convenience of activating/deactivating of the character field 220 with only one hand and freeing the other hand for character entry.

As for claim 2, the deactivation is taught by using Danielson's toggling switch.

As for claim 3, Danielson's first press and release on the switch reads on claimed first manipulation and second press and release reads on claimed second manipulation.

As for claims 4-5, a squeeze switch and a button are both common switch mechanisms.

As for claim 6, Henry teaches also character input area 160 and anticipated character selection field 240 that could be used in any combination with the individual character selection field 220 so as to be activated (popped-up) together.

Art Unit: 2673

As for claim 7, Henry teaches that the selection field 240 can be varied in size by dragging the periphery of the field. Obviously, it would be an alternative to activate and deactivate this field 240 instead of field 220 together with this size-changing feature.

As for claim 8, Henry teaches a user interface for a handheld computer system, the handheld computer system (figures 1, 3, 5; portable computing device) comprising a display (display screen 120/400) and a touch pad (underlying pressure sensitive areas for input or selection),

the user interface comprising:

means (individual character selection field 220) for receiving information at the touch pad and the display;

the means (field 220 showing an exhaustive list of characters 230a, 230b, 230c, etc. available for entry) for receiving a display in a graphical user interface (as shown) to prompt a user to input text information (characters).

Further Henry teaches a means (a switch on the computing device or activation area 411) for activating the means for receiving and that the means is not located on the display (this switch is outside the display screen versus the equivalent activation area 411 on the display screen). See column 2, line 65 through column 3, line 12; column 3, lines 31-44; and column 4, lines 34-61.

However, Henry does not teach using the same means for deactivating the means for receiving, and wherein the means for receiving is reduced in size or removed from the display when deactivated and the means for activating and deactivating is not located on the display. Further, Henry does not teach wherein the means for activating

Art Unit: 2673

and deactivating is located on the side of a housing of the handheld computer, the housing being sized to be held in one hand, the switch positioned on the housing such that when the housing is squeezed by the one hand, the switch is toggled.

Danielson teaches a portable data collection terminal with a switch 472, wherein in one mode an internal scanner is activated when the switch is depressed and released and is deactivated when the switch is depressed and released a second time (figure 29 or 30; column 25, lines 49-57). This method is well known in the art as toggling.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate Danielson's switching method into Henry's switch, since this is a very common and straight-forward way of using a switch (toggling) in activating and deactivating the selection field 220.

Still, Henry, in combination with Danielson, does not teach wherein the means for activating and deactivating is located on the side of a housing of the handheld computer, the housing being sized to be held in one hand, the switch positioned on the housing such that when the housing is squeezed by the one hand, the switch is toggled. Armstrong teaches a handheld PDA where there is a (pressure-sensitive) analog rocker 14 on the side of housing 11 (Fig. 6; column 6, lines 3-47). Inherently, the rocker 14 is to be operated by a left hand that holds the PDA at the same time. At the time of the invention, one of ordinary skill in the art would recognize a similar benefit of having modified Henry's switch on the side of the housing so that the activation and deactivation of the character field 220 could be done conveniently by the same hand holding the portable computing device.

Art Unit: 2673

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to locate modified Henry's switch on a side of the portable computing device to be operated and hold by the same hand, thus providing the convenience of activating/deactivating of the character field 220 with only one hand and freeing the other hand for character entry.

As for claim 9, Henry's individual character selection field 220 reads on claimed pictorial representation of a keyboard or an area assigned for entering text information.

As for claims 10-11, Henry's character input area 160 could similarly be used in place of the individual character selection field 220 as the field for activation and deactivation.

As for claim 12, naturally when deactivated, the individual character selection field 220 would be removed versus being displayed when activated; otherwise the purpose of activation in the first place is defeated.

Claim 13 is rejected per analyses of claims 8-12 and 5.

As for claims 14-15, as shown, modified Henry's switch is inherently integrated into a portion of a housing of the handheld computer.

As for claims 16-17, it is a basic convenience to provide a specific symbol at the switch to designate the function of the switch.

Method claims 18-22 only differ from claims 1-7 in that the claimed pressure sensitive switch is a non-toggling type. Henry as modified by Armstrong would provide a non-toggling pressure sensitive switch as claimed. Henry's activation area 411 reads on claimed touch sensor.

Art Unit: 2673

Response to Arguments

9. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V Sheng whose telephone number is (703) 305-6708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng
January 11, 2005


Jimmy H. NGUYEN
Primary Examiner